The New York State Department of Environmental Conservation (Department) is proposing new standards for all coastal recreation waters to meet the requirements of the federal Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000 (P.L. 106-284). In addition, the Department is proposing to reclassify certain Class I waters consisting of Upper New York Bay and a portion of Lower New York Bay to add the best usage of primary contact recreation to these waters.

1. Effect of Rule

The Department reviewed the proposed rule and identified the likely anticipated costs that are set forth in this section. The Department identified 41 municipal wastewater treatment plants ranging from 0.1 million gallons per day (MGD) to 135 MGD treatment capacity discharging to coastal recreation waters (including waters proposed for reclassification by this rule). Sixteen (16) of the 41 municipal wastewater treatment plants discharge to the Great Lakes, while the remaining 25 facilities discharge to marine coastal recreation waters (including waters proposed for reclassification by this rule). Additionally, 4 Private, Commercial, and Institutional (PCI) facilities were identified as surface water sanitary dischargers to marine coastal recreation waters.

The financial impact due to the adoption of the proposed E. coli standard is considered to be *de minimus*, as existing disinfection treatment facilities discharging to the Great Lakes are expected to meet the proposed standard without significant adjustments.

Under the proposed enterococci standards 25 municipal wastewater treatment plants and 4 PCI facilities discharging to marine coastal recreation waters (including waters proposed for

reclassification by this rule) will likely need to upgrade their existing disinfection systems or incur increased operation and maintenance (O&M) costs resulting from higher dosing. The Department analyzed the costs associated with disinfection using chlorination and ultraviolet radiation (UV).

The estimated unit cost for building a UV disinfection system is $512,676/MGD design flow in capital costs with an estimated O&M cost of $10,000/MGD per year. Given that the total capital cost for conversion to UV disinfection is significantly higher than other alternatives, the estimated financial impact assumes that the impacted facilities will not choose the UV option. For facilities that already have an existing UV disinfection system, the most cost-effective alternative is to double the UV light intensity or dosing, thus the financial impact of $10,000/MGD per year will be that resulting solely from increased O&M expenditures. Construction of a de-chlorination facility is estimated to cost $220,000/MGD. The average O&M cost of approximately $18,600/MGD per year was used to determine the potential financial impact associated with O&M for facilities utilizing chlorination and de-chlorination and $27,900/MGD per year for facilities that currently chlorinate but will need to add de-chlorination facilities. The estimated total financial impact is as follows: 8 municipal wastewater treatment facilities and 2 PCI facilities would incur a collective capital cost of approximately $35 million to construct chlorination/dechlorination; 29 impacted facilities would incur increased O&M costs, collectively totaling approximately $13 million per year.

Certain coastal Class SB waters (including waters proposed for reclassification from Class I to Class SB by this rule) are impacted by Combined Sewer Overflows (CSO). The New York City (NYC) CSO control program is being implemented through the development of Long Term Control Plans (LTCPs). The LTCPs must meet the regulatory requirements of the EPA's

CSO Control Policy as per the Clean Water Act (CWA) section 402(q), and adhere to the terms of the 2005 Consent Order between NYSDEC and NYC (Case No. CO2-20000107-8), as modified in 2008, 2009, 2012, 2015, 2016, and 2017 (collectively the "Consent Order"). LTCPs evaluate the cost-effectiveness of a range of control options/strategies, including up to 100% CSO capture. Given that NYC must currently comply with EPA's CSO control policy through the development and implementation of these LTCPs, no additional costs are anticipated to be driven by this rulemaking beyond those already required by the Consent Order, the LTCPs, NYC's State Pollutant Discharge Elimination System (SPDES) Permits, the CSO Control Policy and CWA section 402(q). These existing and continuing requirements are expected to result in the submission of approvable Jamaica Bay and City-Wide LTCPs that will include projects designed to achieve the highest attainable condition within the CSO impacted waterbodies.

The proposed reclassification would also cause a more stringent, existing Class SB aquatic life standard for Dissolved Oxygen (DO) to apply to these waters. The existing DO standard for Class I is a minimum of 4.0 mg/L, while the existing DO standard for Class SB is a minimum of 4.8 mg/L, with allowable excursions below 4.8 mg/L for limited periods of time. An examination of the current DO levels in these water bodies reveals that the new standard would be attained and not likely result in additional costs.

2. Compliance Requirements

As part of the SPDES program, all significant permittees (for permit classifications see the Department's Technical & Operational Guidance Series (TOGS) 1.2.2) are required to periodically report monitoring data for substances include in their permit. The proposed regulations are not expected to increase or decrease the number of significant SPDES permittees.

Dischargers that may be required to report on a parameter for which they were previously not regulated would have to maintain records and report the discharge level of the newly regulated parameter on existing reports. This proposed rule does not require the submission of any new forms. As mentioned above, the Department has identified costs associated with the proposed rule that may be incurred by small businesses or local governemnts.

3. Professional Services

There may be professional engineering services needed for the facilities potentially affected by the proposed rule, as mentioned above, to upgrade existing disinfection systems.

4. Compliance Costs

The Department reviewed the proposed rule and identified the likely anticipated costs that are set forth in this section. The estimated total financial impact for the municipal wastewater treatment facilities and PCI facilities to meet the proposed standards is a capital cost of approximately $35 million and a net increase in O&M costs of approximately $13 million per year. For a more detailed discussion please see above.

5. Economic and Technological Feasibility

The Department has concluded that compliance by regulated parties is both economically and technologically feasible. Under the proposed enterococci standards 25 municipal wastewater treatment plants and 4 PCI facilities discharging to marine coastal recreation waters (including waters proposed for reclassification by this rule) will likely need to upgrade their existing disinfection systems or incur increased O&M costs resulting from higher dosing.

6. Minimizing Adverse Impact

In developing this rulemaking, consideration was given to approaches that would minimize adverse economic impacts of the rule on small businesses and local governments such as differing requirements, outcome standards, and potential exemptions from coverage. Given the nature of this rule, and in order to adequately protect the waters of the State and to meet the requirements of federal law, differing requirements or potential exemptions for small businesses and local governments were not feasible. However, for the potentially impacted facilities subject to this rule, the Department will allow necessary time to establish a path to compliance.

The proposed regulatory changes, if adopted, would take effect on the date that the Notice of Adoption is published in the State Register. The Department recognizes that it may be unreasonable, both physically and fiscally, to expect regulated parties to comply with the regulations immediately. After the rulemaking becomes effective it would be implemented in permits when modified. If additional treatment is required, a compliance schedule in the permit may be worked out on a case-by-case basis with the permittee. Such a compliance schedule may require the permittee to submit a report describing their chosen treatment alternative and include a schedule for construction. Under such a scenario, the Department would review and, if appropriate, would approve the report before construction would commence. Although it is difficult to estimate, with accuracy, the amount of time necessary for regulated parties to achieve compliance with the proposed rule, it is expected that the Department will be able to review and renew affected permits within five years of the effective date of promulgation.

7. Small Business and Local Government Participation

The Department will inform the public about the proposed rule through the Department website, letters to dischargers and municipalities, and notices in the Environmental Notice Bulletin and the State Register. The Department will hold two public hearings pertaining to the rulemaking. The public will have the opportunity to comment on the proposed rule by attending a public hearing or by submitting written comments to the Department.